PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

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NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)

(PCT Rules 44bis 3(c) and 72.2)

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Date of mailing (day/month/year) 06 July 2006 (06.07.2006)	
Applicant's or agent's file reference G204042	IMPORTANT NOTIFICATION
International application No. PCT/JP2004/014209	International filing date (day/month/year) 29 September 2004 (29.09.2004)
Applicant ZEON CORPORATION et al	

<u> </u>	Transmittal	of the translation	to the applicant.
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patentability (Chapter II).

6 /	The International Bureau transmits herewith a copy of the English translation of the international pretitionary report of patentability (Chapter I).
	The International Bureau transmits herewith a copy of the English translation of the international preliminary report or

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or ejected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TB, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

Authorized officer

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference G204042	FOR FURTHER ACTION	See item 4 below	
International application No. PCT/JP2004/014209	International filing date (day/month/year) 29 September 2004 (29.09.2004)	Priority date (day/month/year) 30 September 2003 (30.09.2003)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant ZEON CORPORATION			

1.	This international preliminary re International Searching Authori	eport on patentability (Chapte ty under Rule 44 bts.1(a).	er I) is issued by the International Bureau on behalf of the	
2:	This REPORT consists of a total	d of 4 sheets, including this c	over sheet.	
	In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.			
3.	. This report contains indications relating to the following items:			
	Box No. I	Basis of the report		
	Box No. II	Priority		
	Box No. III	Non-establishment of opi applicability	nion with regard to novelty, inventive step and industrial	
	Box No. IV	Lack of unity of invention	ņ	
	Box No. V	Reasoned statement unde applicability; citations an	r Article 35(2) with regard to novelty, inventive step or industrial d explanations supporting such statement	
	Box No. VI	Certain documents cited		
	Box No. VII	Certain defects in the inte	emational application	
	Box No. VIII	Certain observations on t	he international application	
4,	The International Bureau will c not, except where the applicant date (Rule 44bis .2).	ommunicate this report to de makes an express request un	signated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but der Article 23(2), before the expiration of 30 months from the priority	

			Date of issuance of this report 26 June 2006 (26.06.2006)	
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	Date of issuance of this report 26 June 2006 (26.06.2006)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Yoshiko Kuwahara
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PATENT COOPERATION TREATY

TRANSLATION From the INTERNATIONAL SEARCHING AUTHORITY WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bir.1) Date of mailing tdav/momb/year) Applicant's or agent's file reference FOR FURTHER ACTION See paragraph 2 below G204042 Priority date (day/month/year) International filing date (day/month/year) International application No. 30.09.2003 29.09.2004 PCT/JP2004/014209 International Patent Classification (IPC) or both national classification and IPC Applicant ZEON CORPORATION This opinion contains indications relating to the following items: Box No. I Basis of the opinion Box No. II Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Box No. III Box No. IV Lack of unity of invention Reasoned statement under Rule 43bis, lightly with regard to povelty, inventive step or industrial Box No. V applicability; citations and explanations supporting such statement Box No. VI Certain documents cited Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application FURTHER ACTION If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66. (bin/b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/230. For further details, see notes to Form PCT/ISA/220. 3. Authorized officer Name and making address of the ISA/JP

Telephone No.

Facsimile No.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/014209

Bo	ex No. I Basis of this opinion	
1.	With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.	
	This opinion has been established on the basis of a translation from the original language into the following language which is the language of a translation furnished for the purposes of international search (under	
	Rule 12.3 and 23.1(b)).	-
2.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:	j.
	a. type of material	
	a sequence listing	000
	table(x) related to the sequence listing	
	h format of material	
	in written format	
	in computer readable form	
	e. time of filing/furnishing	
	contained in the international application as filed.	
	filed together with the international application is computer readable form.	
	furnished subsequently to this Authority for the purposes of search.	
3.	In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished	r s
4.	Additional comments:	
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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2004/014209

Box			nic 43bis I(axi) with regard to novelty, inventive step or industrial applicability; aporting such statement	*****
1	Statement			
	Novelty (N)	Claims	1-7	YES,
		Claims		NO
	Inventive step (18)	Claims	1-7	YES
		Claims		NO.
	Industrial applicability (IA)	Claims	17	YES
		Claims		NO

2. Citations and explanations:

Document 1: JP, 6-287503, A (Nippon Zeon Co., Ltd.), 11 October, 1994 (11.10.94)

Document 2: JP, 62-117898, A (Japan Synthetic Rubber Co., Ltd.), 29 May, 1987 (29.05.87)

Document 3; JP, 56-70038, A (Nippon Zeon Co., Ltd.), 11 June, 1981 (11.06.81)

Claims 1-6

The inventions of claims 1-6 appear to involve an inventive step in view of documents 1-3 cited in the ISR.

Documents 1-3 do not describe the idea that the crosslinkable rubber composition is a mixture of (1) a nitrile copolymer rubber (A) containing a carboxyl group wherein the carboxyl group content in 100g equals 2×10^{-3} to 1×10^{-1} and (2) an acryl-based polymer (B) containing a carboxyl group wherein the carboxyl group content in 100g equals 4×10^{-1} to 1×10^{-1} , which has a crosslinking agent mixed in that is crosslinkable with carboxyl groups. And through this, the invention of the present application produces the advantageous effect of giving a crosslinked object which is excellent not only in mechanical properties including tensile strength and reduced compression set and oil resistance but also in dynamic ozone resistance and flexural fatigue resistance.

Claim 7

The invention of claim 7 appears to involve an inventive step concerning the disclosures of documents 1-3 cited in the ISR.

Documents 1-3 do not describe the idea that the crosslinked object is the product of the crosslinking of a crosslinkable rubber composition wherein a crosslinking agent (C) that is crosslinkable with carboxyl groups is mixed into a mixture of (1) a nitrile copolymer rubber (A) containing a carboxyl group wherein the carboxyl group content in 100g equals 2 x 10⁻³ to 1 x 10⁻¹ and (2) an acryl-based polymer (B) containing a carboxyl group wherein the carboxyl group content in 100g equals 4 x 10⁻⁴ to 1 x 10⁻¹. And through this, the invention of the present application produces the advantageous effect of being excellent not only in mechanical properties including tensile strength and reduced compression set and oil resistance but also in dynamic ozone resistance and flexural fatigue resistance.